



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/828,308

04/21/2004

Hiroko Mano

R2184.0311/P311

4787

24998 7590 07/22/2008

DICKSTEIN SHAPIRO LLP
1825 EYE STREET NW
Washington, DC 20006-5403

EXAMINER

LOVEL, KIMBERLY M

ART UNIT

PAPER NUMBER

2167

MAIL DATE

DELIVERY MODE

07/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/828,308	Applicant(s) MANO, HIROKO	
	Examiner KIMBERLY LOVEL	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 13-21, 25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-21, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is in response to the Amendment filed 10 March 2008.
2. Claims 1-9, 13-21, 25 and 26 are currently pending and claims 10-12 and 22-24 have been canceled. In the Amendment filed 10 March 2008, claims 1, 3, 4, 5, 8, 13, 15-17, 20 and 26 have been amended. This action is made Final.

Drawings

3. The objection to the drawings has been withdrawn as necessitated by Applicant's amendment to the specification.

Claim Objections

4. Claim 26 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 26 recites "a computer readable recording medium storing the computer program as claimed in claim 25." Claim 25 has been amended to include the limitation "recorded in a computer readable medium." Therefore, claim 26 no longer further limits claim 25.

Claim Rejections - 35 USC § 112

5. The rejections of **claims 1 and 8** under 35 U.S.C. 112, second paragraph, have been withdrawn as necessitated by Applicant's amendment.

Claim Rejections - 35 USC § 101

6. The rejection of **claim 25** under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter has been withdrawn as necessitated by amendment.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1, 3, 7, 13, 15, 19, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by US PGPub 2003/0050927 to Hussam (hereafter Hussam).**

Referring to claim 1, Hussam discloses a document retrieval apparatus, comprising:

a query character string input unit that accepts an input of a query character string including a plurality of retrieval keywords [entering the desired search terms] (see [0077], lines 6-8; [0245], lines 6-10; and Fig 14);

a document select unit that selects one or more documents that match the query character string from a document database [compiles a subset or collection of documents based upon the search terms or keywords selected] (see [0077], lines 8-10);

a retrieval result output unit that presents retrieval results of the selected documents to a user [presents the resulting collection of documents to the user; return the list of found URLs] (see [0077], lines 10-11 and [0245], lines 11); and

a unit that allows a user to designate one of the selected documents [opening any URL will force SHIRE to retrieve that document from the sample pool of HTML documents on the SHIRE server] (see [0245], lines 14-16);

a document output unit that presents the contents of one of the selected documents designated by the user [by 'clicking' on the pie chart icon, the Semantic Highlighting tools will display color-coded highlighted terms within the retrieved HTML document; opening any URL will force SHIRE to retrieve that document from the sample pool of HTML documents on the SHIRE server] (see [0211], lines 3-6; [0245], lines 14-16);

wherein the document output unit determines a manner in which the retrieval keywords are highlighted in the presented one of the selected documents in accordance

with a feature index indicating an extent to which each of the retrieval keywords has contributed to the selection of the documents [it starts by building a color-coded legend of search terms, and displaying the total number of hits per term; for each document in the hit list, it keeps track of the number of times the term occurred within the document, the sum of the number of hits of all terms in each document and the URL for that document] (see [0248], lines 3-7; and [0252]), and highlights the retrieval keywords [highlighting terms] in the presented one of the selected documents in the determined manner (see [0254]).

Referring to claim 3, Hussam discloses the document retrieval apparatus as claimed in claim 1, further comprising:

a table [a color-coded legend of search terms] in which a corresponding relation of a feature index to a color is registered [a color is assigned to each term] (see [0208] and [0248], lines 3-7);

wherein the document output unit determines the color corresponding to the feature index of each retrieval keyword with reference to the table, and displays the retrieval keyword using the determined color in a different manner from a manner in which other words are displayed [the content script decodes the search string and breaks the search string into individual terms in order to be able to highlight each term with a unique color within the document body; it starts the actual process of highlighting terms by iterating over all terms] (see [0254]).

Referring to claim 7, Hussam discloses the document retrieval apparatus as claimed in claim 1, further comprising:

a ranking unit that ranks the retrieval keywords included in the selected documents in accordance with a feature index indicating an extent to which each retrieval keyword has contributed to the selection of the selected documents (see [0248], lines 3-7 and [0252]);

wherein the document output unit, when highlighting the retrieval keywords in the determined manner, displays the result of the ranking with the contents of one of the selected documents (see [0252] and [0254]).

Referring to claim 13, Hussam discloses a method of retrieving documents, comprising the steps of:

accepting an input of a query character string including a plurality of retrieval keywords [entering the desired search terms] (see [0077], lines 6-8; [0245], lines 6-10; and Fig 14);

selecting one or more documents that match the query character string from a document database [compiles a subset or collection of documents based upon the search terms or keywords selected] (see [0077], lines 8-10);

presenting retrieval results of the selected documents to a user [presents the resulting collection of documents to the user; return the list of found URLs] (see [0077], lines 10-11 and [0245], lines 11), the user designating one of the selected documents [opening any URL will force SHIRE to retrieve that document from the sample pool of HTML documents on the SHIRE server] (see [0245], lines 14-16); and

presenting the contents of one of the selected documents designated by the user [by 'clicking' on the pie chart icon, the Semantic Highlighting tools will display color-

coded highlighted terms within the retrieved HTML document; opening any URL will force SHIRE to retrieve that document from the sample pool of HTML documents on the SHIRE server] (see [0211], lines 3-6; [0245], lines 14-16);

wherein the document output unit determines a manner in which the retrieval keywords are highlighted in the presented one of the selected documents in accordance with a feature index indicating an extent to which each of the retrieval keywords has contributed to the selection of the documents [it starts by building a color-coded legend of search terms, and displaying the total number of hits per term; for each document in the hit list, it keeps track of the number of times the term occurred within the document, the sum of the number of hits of all terms in each document and the URL for that document] (see [0248], lines 3-7; and [0252]), and highlights the retrieval keywords [highlighting terms] in the presented one of the selected documents in the determined manner (see [0254]).

Referring to claim 15, Hussam discloses the method as claimed in claim 13, wherein a color corresponding to the feature index of each retrieval keyword is determined with reference to a feature index/color table [a color-coded legend of search terms] in which a corresponding relation of the feature index to a color is registered [a color is assigned to each term] (see [0208] and [0248], lines 3-7), and the retrieval keyword is displayed using the determined color in a different manner from a manner in which other words are displayed [the content script decodes the search string and breaks the search string into individual terms in order to be able to highlight each term

with a unique color within the document body; it starts the actual process of highlighting terms by iterating over all terms] (see [0254]).

Referring to claim 19, Hussam discloses the method as claimed in claim 13, further comprising the step of: ranking the retrieval keywords included in the selected documents in accordance with a feature index indicating an extent to which each retrieval keyword has contributed to the selection of the selected documents (see [0248], lines 3-7; [0252]; and [0254]).

Referring to claim 25, Hussam discloses a computer program [application program] recorded in a computer readable medium that causes a computer to operate as the document retrieval apparatus as claimed in claim 1 (see [0077] and [0275]).

Referring to claim 26, Hussam discloses a computer readable recording medium storing the computer program as claimed in claim 25 (see [0275]).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2003/0050927 to Hussam as applied respectively to claims 1 and 13 above, and further in view of US Patent No 5,787,421 to Nomiya (hereafter Nomiya).

Referring to claim 2, while Hussam discloses the feature index corresponding to retrieval keywords including for each document in the hit list, keeping track of the number of times the term occurred within the document (see [0248], lines 3-7), Hussam fails to explicitly disclose the further limitation of the index indicating the number of selected documents including one of the retrieval keywords. Nomiya discloses collecting data on keywords contained in the documents retrieved by the keyword retrieval engine, including the further limitation, wherein the feature index corresponding to one of the retrieval keywords indicates the number of the selected documents including one of the retrieval keywords [the number of documents containing individual keywords] (see column 4, lines 7-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the number of documents containing individual keywords disclosed by Nomiya for the number of times the term occurred within the document disclosed by Hussam. One would have been motivated to do so since both types of counts are well-known in the art for ranking retrieved documents for display.

Referring to claim 14, while Hussam discloses the feature index corresponding to retrieval keywords including for each document in the hit list, keeping track of the number of times the term occurred within the document (see [0248], lines 3-7), Hussam

fails to explicitly disclose the further limitation of the index indicating the number of selected documents including one of the retrieval keywords. Nomiya discloses collecting data on keywords contained in the documents retrieved by the keyword retrieval engine, including the further limitation, wherein the feature index corresponding to one of the retrieval keywords indicates the number of the selected documents including one of the retrieval keywords [the number of documents containing individual keywords] (see column 4, lines 7-35).

It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the number of documents containing individual keywords disclosed by Nomiya for the number of times the term occurred within the document disclosed by Hussam. One would have been motivated to do so since both types of counts are well-known in the art for ranking retrieved documents for display.

11. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2003/0050927 to Hussam as applied respectively to claims 1 and 13 above, and further in view of US Patent No 6,094,651 to Agrawal et al (hereafter Agrawal).

Referring to claim 4, while Hussam discloses the a table [a color-coded legend of search terms] in which a corresponding relation of the feature index to a color is registered [a color is assigned to each term] (see [0208] and [0248], lines 3-7); wherein the document output unit determines the color corresponding to the feature index of each retrieval keyword with reference to the table, and displays the retrieval keyword

using the determined color in a different manner from a manner in which other words are displayed [the content script decodes the search string and breaks the search string into individual terms in order to be able to highlight each term with a unique color within the document body; it starts the actual process of highlighting terms by iterating over all terms] (see [0254]), Hussam fails to explicitly disclose the concept of a gray scale table instead of a color table. Agrawal discloses describing relative intensity of highlighting in terms of colors, including the further concept of replacing the colors with a grey scale (see column 4, lines 56-58).

It would have been obvious to replace the colors disclosed by Hussam with the grey scale of Agrawal. One would have been motivated to do so since grey scale is simply another means to attract the user's attention to some item or items of interest (Hussam: see [0012], lines 12-14).

Referring to claim 16, while Hussam discloses a color table [a color-coded legend of search terms] in which a corresponding relation of the feature index to a color is registered [a color is assigned to each term] (see [0208] and [0248], lines 3-7); wherein the document output unit determines the color corresponding to the feature index of each retrieval keyword with reference to the color table, and displays the retrieval keyword using the determined color in a different manner from a manner in which other words are displayed [the content script decodes the search string and breaks the search string into individual terms in order to be able to highlight each term with a unique color within the document body; it starts the actual process of highlighting terms by iterating over all terms] (see [0254]), Hussam fails to explicitly disclose the

concept of a gray scale table instead of a color table. Agrawal discloses describing relative intensity of highlighting in terms of colors, including the further concept of replacing the colors with a grey scale (see column 4, lines 56-58).

It would have been obvious to replace the colors disclosed by Hussam with the grey scale of Agrawal. One would have been motivated to do so since grey scale is simply another means to attract the user's attention to some item or items of interest (Hussam: see [0012], lines 12-14).

12. Claims 5, 6, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2003/0050927 to Hussam as applied respectively to claims 1 and 13 above, and further in view of US PGPub 2004/0175036 to Graham (hereafter Graham).

Referring to claim 5, while Hussam discloses the a color table [a color-coded legend of search terms] in which a corresponding relation of the feature index to a color is registered [a color is assigned to each term] (see [0208] and [0248], lines 3-7); wherein the document output unit determines the color corresponding to the feature index of each retrieval keyword with reference to the color table, and displays the retrieval keyword using the determined color in a different manner from a manner in which other words are displayed [the content script decodes the search string and breaks the search string into individual terms in order to be able to highlight each term with a unique color within the document body; it starts the actual process of highlighting terms by iterating over all terms] (see [0254]), Hussam fails to explicitly disclose the

concept of a type face table instead of a color table. Graham discloses highlighting terms, including the further concept of using different type face [font sizes] instead of using different colors to highlight text (see [0119]).

It would have been obvious to replace the colors in the table disclosed by Hussam with the different font sizes disclosed by Graham. One would have been motivated to do so since type face is simply another means to attract the user's attention to some item or items of interest (Hussam: see [0012], lines 12-17).

Referring to claim 6, the combination of Hussam and Graham (hereafter Hussam/Graham) discloses the document retrieval apparatus as claimed in claim 5, wherein the type face includes at least one of font, size [font size], and style of a character (see [0119]).

Referring to claim 17, while Hussam discloses the a color table [a color-coded legend of search terms] in which a corresponding relation of the feature index to a color is registered [a color is assigned to each term] (see [0208] and [0248], lines 3-7); wherein the document output unit determines the color corresponding to the feature index of each retrieval keyword with reference to the color table, and displays the retrieval keyword using the determined color in a different manner from a manner in which other words are displayed [the content script decodes the search string and breaks the search string into individual terms in order to be able to highlight each term with a unique color within the document body; it starts the actual process of highlighting terms by iterating over all terms] (see [0254]), Hussam fails to explicitly disclose the concept of a type face table instead of a color table. Graham discloses highlighting

terms, including the further concept of using different type face [font sizes] instead of using different colors to highlight text (see [0119]).

It would have been obvious to replace the colors in the table disclosed by Hussam with the different font sizes disclosed by Graham. One would have been motivated to do so since type face is simply another means to attract the user's attention to some item or items of interest (Hussam: see [0012], lines 12-17).

Referring to claim 18, Hussam/Graham discloses the method as claimed in claim 17, wherein the type face includes at least one of font, size [font size], and style of a character (see [0119]).

13. Claims 8, 9, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2004/0034629 to Genser (hereafter Genser) in view of US PGPub 2003/0050927 to Hussam.

Referring to claim 8, Genser discloses a document retrieval apparatus, comprising:

a query character string input unit that accepts an input of a query character string including a plurality of retrieval keywords [Search term Entry Field] (see [0059], lines 3-5 and Figs 5-7);

a document select unit that selects one or more documents that match the query character string from a document database (see [0059], lines 10-11 and Figs 5-7);

a retrieval result output unit that presents retrieval results of the selected documents to a user (see [0059], lines 10-11 and Figs 5-7); and

a unit that allows a user to designate one of the selected documents [for a user action of clicking on a search result item or an index result item in a search list, the user may then be taken to the appropriate item and page] (see [0064]);

a document output unit that presents the contents of one of the selected documents designated by the user (see [0059]);

wherein the query character string input unit allows a user to designate a word other than the retrieval keywords [de-emphasize a word], the word can be highlighted by the document output unit in the presented one of the selected documents (see [0044], lines 10-12 and [0059], lines 11-15).

Genser fails to explicitly disclose the further limitation of the document output unit determining a manner in which the retrieval keywords are highlighted based on an extent to which each of the retrieval keywords has contributed to document selection. Hussam discloses displaying search results (see abstract), including the further limitation of the document output unit determining a manner in which the retrieval keywords are highlighted based on an extent to which each of the retrieval keywords has contributed to document selection [it starts by building a color-coded legend of search terms, and displaying the total number of hits per term; for each document in the hit list, it keeps track of the number of times the term occurred within the document, the sum of the number of hits of all terms in each document and the URL for that document] (see [0248], lines 3-7; and [0252]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to highlight the terms in Genser utilizing the document output unit of Hussam

to determine the manner in which the terms are highlighted. One would have been motivated to do so in order to provide a visualization techniques that increases the speed of the process of a user locating relevant information (Genser: see [0016]).

Referring to claim 9, the combination of Genser and Hussam (hereafter Genser/Hussam) discloses the document retrieval apparatus as claimed in claim 8, wherein the query character string input unit accepts a designation [NOT] of a retrieval keyword that is not to be highlighted in the designated one of the selected documents (Genser: see [0041], lines 7-8).

Referring to claim 20, Genser discloses a method of retrieving documents, comprising the steps of:

accepting an input of a query character string including a plurality of retrieval keywords [Search term Entry Field] (see [0059], lines 3-5 and Figs 5-7);

selecting one or more documents that match the query character string from a document database (see [0059], lines 10-11 and Figs 5-7);

presenting retrieval results of the selected documents to a user (see [0059], lines 10-11 and Figs 5-7), the user designating one of the selected documents [for a user action of clicking on a search result item or an index result item in a search list, the user may then be taken to the appropriate item and page] (see [0064]); and

presenting the contents of one of the selected documents designated by the user (see [0059]);

wherein the query character string input unit allows a user to designate a word other than the retrieval keywords [de-emphasize a word], the word can be highlighted

by the document output unit in the presented one of the selected documents (see [0044], lines 10-12 and [0059], lines 11-15).

Genser fails to explicitly disclose the further limitation of highlighting the retrieval keywords based on an extent to which each of the retrieval keywords has contributed to document selection. Hussam discloses displaying search results (see abstract), including the further limitation of highlighting the retrieval keywords based on an extent to which each of the retrieval keywords has contributed to document selection [it starts by building a color-coded legend of search terms, and displaying the total number of hits per term; for each document in the hit list, it keeps track of the number of times the term occurred within the document, the sum of the number of hits of all terms in each document and the URL for that document] (see [0248], lines 3-7; and [0252]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to highlight the terms in Genser utilizing the feature of Hussam to determine the manner in which the terms are highlighted. One would have been motivated to do so in order to provide a visualization techniques that increases the speed of the process of a user locating relevant information (Genser: see [0016]).

Referring to claim 21, Genser/Hussam discloses the method as claimed in claim 20, wherein a retrieval keyword that is not to be highlighted in the designated one of the selected documents can be designated (Genser: see [0041], lines 7-8).

Response to Arguments

14. Applicant's arguments filed in regards to the prior art rejections have been fully considered but they are not persuasive.

15. Referring to applicant's arguments on page 11 of the Remarks in regards to claim 1, the applicant states "The cited portions of Hussam only disclose that Hussam's Semantic Highlighting Information Retrieval Engine builds color-coded legend of search terms, displays the total number of hits per term, and displays the search terms with color-coded highlighting. Hussam, however, fails to disclose the 'extent to which each of the retrieval keywords has contributed to the selection of documents.' See Specification, page 15, line 10+."

The examiner respectfully disagrees that Hussam fails to disclose the extent to which each of the retrieval keywords has contributed to the selection. The applicant pointed to page 15, lines 10+ of the specification to explain this limitation. Page 15, lines 10-15 recites "According to the above arrangements, the user can recognize not only whether the search keyword is included in the document and how frequently the search keyword appears in the document, but also how much the search keyword has contributed to the retrieval of the document." The portion of the specification fails to further explain or give examples of the phrase "the extent to which each of the retrieval keywords has contributed to the selection." Hussam sorts the search results using the total number of hits for the keyword (see [0253] and [0254]). Therefore, when the claim language is given the broadest reasonable interpretation, the total number of hits per

term for each keyword is considered to represent the extent to which the keyword has contributed to the selection of the documents.

16. Since claims 2-7, 13-19, 25 and 26 depend from claim 1 or contain similar limitations as claim 1, the rejections are maintained for the reasons stated upon in regards to claim 1.

17. Applicant's arguments with respect to claims 8, 9, 20 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY LOVEL whose telephone number is (571)272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John R. Cottingham/
Supervisory Patent Examiner, Art Unit 2167

Kimberly Lovel
Examiner
Art Unit 2167

15 July 2008
kml